

AMENDMENTS TO THE CLAIMS

CLAIM 1 (AMENDED): A bicycle power supply apparatus comprising:
a battery unit for storing power from a power supply and for supplying power to electrical components;

a power switch operatively coupled to the battery unit for selectively switching power from the battery unit to the electrical components powered by the battery unit to operate the electrical components; and

a first switch control unit that receives power from the power supply and controls the power switch to switch power from the battery unit to the electrical components powered by the battery unit to operate the electrical components, wherein the first switch control unit is controlled by a selected amount of according to the power received from the power supply.

CLAIM 2 (ORIGINAL): The apparatus according to claim 1 wherein the first switch control unit is structured to receive power from the power supply in parallel with the battery unit.

CLAIM 3 (ORIGINAL): The apparatus according to claim 1 wherein the battery unit is structured to receive power from an alternating current generator.

CLAIM 4 (ORIGINAL): The apparatus according to claim 3 further comprising a first rectifier coupled to the battery unit that converts alternating current received from the alternating current generator to direct current that is stored in the battery unit.

CLAIM 5 (PREVIOUSLY PRESENTED): A bicycle power supply apparatus comprising:
a battery unit for storing power from a power supply and for supplying power to electrical components, wherein the battery unit is structured to receive power from an alternating current generator;

a first rectifier coupled to the battery unit that converts alternating current received from the alternating current generator to direct current that is stored in the battery unit;

a power switch operatively coupled to the battery unit for selectively switching power from the battery unit to the electrical components;

a first switch control unit that receives power from the power supply and controls the power switch according to the power received from the power supply;
wherein the first switch control unit comprises:

 a capacitance; and
 a second rectifier that converts alternating current received from the alternating current generator to direct current that is stored in the capacitance.

CLAIM 6 (ORIGINAL): The apparatus according to claim 5 wherein the first switch control unit provides a signal to turn on the power switch when a voltage of the capacitance is above a predetermined level.

CLAIM 7 (PREVIOUSLY PRESENTED): A bicycle power supply apparatus comprising:
 a battery unit for storing power from a power supply and for supplying power to electrical components;
 a power switch operatively coupled to the battery unit for selectively switching power from the battery unit to the electrical components; and
 a first switch control unit that receives power from the power supply and controls the power switch according to the power received from the power supply;
 a motion sensor; and
 a second switch control unit that controls the power switch in response to signals from the motion sensor.

CLAIM 8 (ORIGINAL): The apparatus according to claim 7 wherein the second switch control unit provides a signal to turn on the power switch when the motion sensor senses motion.

CLAIM 9 (ORIGINAL): The apparatus according to claim 7 wherein the second switch control unit provides a signal to turn off the power switch when the motion sensor does not sense motion.

CLAIM 10 (ORIGINAL): The apparatus according to claim 9 wherein the second switch control unit provides a signal to turn off the power switch only when the motion sensor does not sense motion for a predetermined time interval.

CLAIM 11 (ORIGINAL): The apparatus according to claim 7 wherein the motion sensor senses motion based on signals from an alternating current generator.

CLAIM 12 (ORIGINAL): The apparatus according to claim 11 wherein the second switch control unit provides a signal to turn off the power switch only when the motion sensor does not sense signals from the alternating current generator for a predetermined time interval.

CLAIM 13 (ORIGINAL): The apparatus according to claim 7 wherein the battery unit powers the second switch control unit.

CLAIM 14 (ORIGINAL): The apparatus according to claim 13 wherein the battery unit powers the second switch control unit through the power switch.

CLAIMS 15-20 (CANCELED).